



**November 12, 2015**

1516 Ninth Street  
Art Rosenfeld Hearing Room – First Floor  
Sacramento, California 95814  
**10 a.m.**  
(Wheelchair Accessible)

**THE COMMISSION WILL CONSIDER AND MAY TAKE ACTION ON THE FOLLOWING ITEMS:**

1. ENERGY COMMISSION COMMITTEE APPOINTMENTS. Possible approval of appointments to the Energy Commission's Standing Committees and Siting Case Committees. Contact: Kevin Barker. (5 minutes)
2. IVANPAH SOLAR ELECTRIC GENERATING SYSTEM (07-AFC-5C). Possible approval of an order granting the Petition to revise the description of engines used for emergency generators and fire pumps to match the engines that were installed, and to make minor alterations to the Conditions of Certification to bring them into conformance with changes made to the operating permits by the Mojave Desert Air Quality Management District. Contact: Joseph Douglas. (Staff presentation: 5 minutes)
3. CARLSBAD ENERGY CENTER PROJECT AMENDMENTS (07-AFC-06C).
  - a. Conduct hearing, consider comments from the California Department of Fish and Wildlife, and possibly approve an order changing the Commission Decision docketed on August 3, 2015 or possibly appoint a committee to conduct further proceedings. On July 30, 2015, the Commission approved proposed amendments which change the approved project from a 540 megawatt (MW) combined-cycle to a 632 MW simple-cycle power generation facility. The amended project would be located on the eastern portion of the existing Encina Power Station between Carlsbad Boulevard and Interstate-5, east of the railroad corridor and south of the Agua Hedionda Lagoon, in Carlsbad. Contact: Paul Kramer. (Staff presentation: 10 minutes)
  - b. Possible closed session deliberation on the above matters. [Government Code Section 11126(c)(3)].
4. HEARING AND POSSIBLE ADOPTION OF REGULATIONS - BUILDING ENERGY EFFICIENCY STANDARDS, 2016 NONRESIDENTIAL LIGHTING ALTERATIONS (15-BSTD-01).
  - a. INITIAL STUDY AND NEGATIVE DECLARATION. Proposed resolution approving an Initial Study and adopting of a Negative Declaration for proposed changes to the California Building Energy Efficiency Standards, codified in Title 24, Part 6, Sections 141.0(b)2I, J, K, and L of the California Code of Regulations. Contact: Peter Strait. (Staff presentation: 5 minutes)

- b. NONRESIDENTIAL LIGHTING ALTERATIONS. Proposed resolution adopting changes to the nonresidential lighting alteration provisions of the 2016 Building Energy Efficiency Standards in the California Code of Regulations, Title 24, Part 6, Sections 141.0 (b)2I, J, K, and L. Contact: Peter Strait. (Staff presentation: 10 minutes)
- 5. iROBOT CORPORATION. Proposed resolution approving a settlement agreement with iRobot Corporation to resolve alleged violations of the Energy Commission's battery charger system standards in the Appliance Efficiency Regulations, California Code of Regulations, Title 20, sections 1601-1609. Under the settlement agreement, iRobot Corporation agrees to only manufacture for sale in North America product lines that are compliant with the current California efficiency standard by December 1, 2015, to provide a rebate program for consumers who purchased products that did not meet the battery charger system standards, and to pay \$1,000,000 to the Energy Commission. In return, the Energy Commission agrees to close the matter without further action or litigation. Contact: Kristen Driskell. (Staff presentation: 10 minutes)
- 6. MENDOTA BIOENERGY, LLC. Possible approval of proposed order terminating agreement ARV-12-033 with Mendota Bioenergy, LLC. Staff is recommending termination with cause pursuant to agreement term and condition Section 13.a. (ARFVTP funding) Contact: John Butler. (Staff presentation: 10 minutes)
- 7. BUILDING ENERGY USE BENCHMARKING AND PUBLIC DISCLOSURE PROGRAM. Assembly Bill 802 (Williams, Chapter 590, Statutes of 2015) contains provisions regarding energy demand forecasting, and building energy use benchmarking and public disclosure. Staff is requesting approval of an order instituting a rulemaking to gather stakeholder input and create regulations to implement the benchmarking provisions of the new law. Contact: Erik Jensen. (Staff presentation: 10 minutes)
- ~~8. RENEWABLES PORTFOLIO STANDARD PROGRAM—ORDER INSTITUTING RULEMAKING. Possible approval of an order instituting a rulemaking proceeding to amend the Energy Commission's regulations specifying enforcement procedures for the Renewables Portfolio Standard (RPS) for local publicly owned electric utilities, amend the Energy Commission's RPS eligibility guidelines, and implement related RPS policies to address changes in law under Senate Bill 350 (Stats. 2015, ch. 547). Contact: Gabe Herrera (Staff presentation: 5 minutes)~~
- 9. 2016 RESIDENTIAL AND NONRESIDENTIAL BUILDING ENERGY EFFICIENCY STANDARDS COMPLIANCE TOOLS
  - a. 2016 BUILDING ENERGY EFFICIENCY STANDARDS COMPLIANCE MANUALS. Proposed resolution certifying the Residential and Nonresidential Compliance Manuals and Compliance Documents for the 2016 Building Energy Efficiency Standards as required by Public Resources Code Section 25402.1(e). The Compliance Manuals are guidance documents designed to assist the building industry and enforcement agencies. The manuals include forms, charts, tables and other data to assist designers and builders in meeting the Standards. Contact: Payam Bozorgchami. (Staff presentation: 5 minutes)
  - b. 2016 BUILDING ENERGY EFFICIENCY STANDARDS RESIDENTIAL AND NONRESIDENTIAL ALTERNATIVE CALCULATION METHOD (ACM) REFERENCE MANUALS. Proposed resolution certifying the 2016 Residential and Nonresidential ACM Reference Manuals as required by Public Resources Code Section 25402.1(e). The ACM Reference Manuals document the modeling

- methods to be used in the 2016 Compliance Software, which will demonstrate performance compliance with the provisions of the 2016 Building Energy Efficiency Standards. Contact: Larry Froess. (Staff presentation: 5 minutes)
- c. 2016 PUBLIC DOMAIN RESIDENTIAL COMPLIANCE SOFTWARE, CBECC-RES 2016.1.0 AND NONRESIDENTIAL COMPLIANCE SOFTWARE, CBECC-COM 2016.1.0. Proposed resolutions approving the 2016 Public Domain Residential and Nonresidential software used to demonstrate performance compliance with the 2016 Building Energy Efficiency Standards (Public Resources Code Section 25402.1(a)). Contact: Larry Froess. (Staff presentation: 10 minutes)
  - d. 2016 DATA REGISTRY REQUIREMENTS MANUAL. Proposed resolution approving the 2016 Data Registry Requirements Manual. The Data Registry Requirements Manual provides detailed guidance that is in addition to the functional and technical requirements given in the 2016 Reference Joint Appendix JA7 - Data Registry Requirements. The guidance in this Data Registry Requirements Manual is expected to be used by Data Registry Providers for developing their software to enable their users to register standardized compliance documentation and data to demonstrate compliance with Title 24, Part 6. Contact: Jeff Miller. (Staff presentation: 5 minutes)
10. LAWRENCE BERKELEY NATIONAL LABORATORY. Proposed resolution approving Amendment 2 to Contract 500-11-025 with the Department of Energy's Lawrence Berkeley National Laboratory to extend the term by 18 months to September 2017 to provide the full duration for data collection and analysis, to augment the budget by \$500,000 for a total project budget of \$1,500,000, and to modify the scope to add activities and deliverables commensurate with the added funding and time. This amendment will provide the vehicle-to-grid demonstration sufficient time and resources to collect all necessary data and complete the originally-planned full analysis. (ARFVTP funding) Contact: Kiel Pratt. (Staff presentation: 5 minutes)
11. REGIONAL CLIMATE IMPACTS AND ADAPTATION STUDIES FOR THE NATURAL GAS SYSTEM AND OTHER ENVIRONMENTAL ISSUES, PON-14-507. This grant solicitation sought to support research that addresses natural gas sector climate resilience policy, implementation, and management needs articulated by the Energy Commission's 2014 Integrated Energy Policy Report, California's Climate Change Research Plan (2015), and Safeguarding California: Reducing Climate Risk (2013). (PIER Natural Gas funding) Contact: Susan Wilhelm. (Staff presentation 10 minutes)
- a. UNIVERSITY OF CALIFORNIA, SAN DIEGO. Proposed resolution approving Agreement PIR-15-005 with The Regents of the University of California on behalf of the San Diego campus for a \$399,467 grant to develop weather and climate forecasts along with seasonal predictions for temperature and precipitation of 0-9 months and decadal predictions of 10-20 years for selected meteorological stations in California. These projections will form the basis of 10-20 year lead-time predictions of weather and climate fluctuations that will affect California's natural gas system.
  - b. GAS TECHNOLOGY INSTITUTE. Proposed resolution approving Agreement PIR-15-003 with Institute of Gas Technology dba Gas Technology Institute (GTI) for a \$599,891 grant to fund the development and validation of a field method to

- measure and analyze fugitive methane leaks/emissions from commercial buildings in northern and southern California.
- c. ICF INCORPORATED, L.L.C. Proposed resolution approving Agreement PIR-15-004 with ICF Incorporated, L.L.C. for a \$456,703 grant to conduct a detailed, robust, climate change vulnerability assessment and identify and evaluate appropriate adaptation measures. This will provide a suite of practical, actionable climate change adaptation measures optimized to San Diego Gas & Electric's natural gas system and customer needs.
  - d. UNIVERSITY OF CALIFORNIA, DAVIS. Proposed resolution approving Agreement PIR-15-002 with The Regents of the University of California on behalf of the Davis campus for a \$500,000 grant to improve understanding of installed performance of solar water heating systems in California single-family homes and develop recommendations for improving penetration and environmental benefits of this technology in California.
12. UNIVERSITY OF CALIFORNIA, BERKELEY. Proposed resolution approving Agreement EPC-15-008 with The Regents of the University of California on behalf of the Berkeley campus for a \$400,000 grant to support the development of innovative web-based visualizations, custom tool development, and targeted outreach using Cal-Adapt that will provide critical data on the changing climate and its potential impacts on California's energy infrastructure. (EPIC funding) Contact: Susan Wilhelm. (Staff presentation: 5 minutes)
  13. INVESTING IN CALIFORNIA COMMUNITIES THROUGH BUILDING ENERGY EFFICIENCY WORKFORCE DEVELOPMENT, GFO-15-302. This grant solicitation sought to fund market facilitation projects that realize significant, long-term energy efficiency gains in the building sector by ensuring an adequately trained workforce exists for the proper installation and maintenance of advanced energy efficiency technologies and strategies. (EPIC funding) Contact: Rachel Salazar. (Staff presentation: 5 minutes)
    - a. CALIFORNIA HOMEBUILDING FOUNDATION. Proposed resolution approving Agreement EPC-15-009 with California Homebuilding Foundation (CHF) for a \$4,431,918 grant to fund market assessment, targeted outreach, dissemination of information, and workforce training on High Performance Attics (HPAs) and High Performance Walls (HPWs), two of the new requirements in California's Building Energy Efficiency Standards for 2016. This agreement will ensure that an adequate number of California workers have the skills needed to properly install products and systems.
    - b. CENTER FOR SUSTAINABLE ENERGY. Proposed resolution approving Agreement EPC-15-010 with Center for Sustainable Energy for a \$4,476,189 grant to expand energy-related career pathways and increase workforce development opportunities in disadvantaged communities by delivering training on Automated Demand Response communication equipment.
  14. BIOFUELS EARLY & PRE-COMMERCIAL TECHNOLOGY DEVELOPMENT, PON-14-602. This grant solicitation sought proposals for biofuels projects that are in the early/pre-commercial technology development stage. This solicitation put emphasis on transformative technology solutions to significant biofuels industry problems that increase yields, productivity, or cost effectiveness of biofuel production; or that target a significant unmet need in California's biofuels industry. (ARFVTP funding) Contact: Hieu Nguyen. (Staff presentation 10 minutes)

- a. ALTEX TECHNOLOGIES CORPORATION. Proposed resolution approving Agreement ARV-15-009 with Altex Technologies Corporation for a \$999,993 grant to develop and demonstrate an energy-efficient and cost-effective technology to convert California forest residue and energy crops to renewable gasoline, a drop-in fuel that is fully fungible with petroleum-based gasoline. This project will assess the technical and economic feasibility of scaling up their 1 barrel per day Biomass Conversion to Synthetic Gasoline System (BCSGS) to a commercial scale facility.
  - b. SAN DIEGO STATE UNIVERSITY RESEARCH FOUNDATION. Proposed resolution approving Agreement ARV-15-011 with San Diego State University Research Foundation for a \$305,624 grant to develop an energy-efficient and cost-effective microalgae cell disruption process for enhancing lipids extraction and increasing algal biodiesel yields by utilizing elemental copper and copper sulfate.
  - c. WEST BIOFUELS, LLC. Proposed resolution approving Agreement ARV-15-017 with West Biofuels, LLC for a \$1,000,000 grant to develop a temperature control system, design and build a mixed alcohol synthesis (MAS) catalyst system to produce large chain alcohols, and calculate a pathway under the Low-Carbon Fuel Standard. This project will validate a process to convert gasifier syngas from biomass residue to ethanol for blending with gasoline for transportation fuel.
15. NATURAL GAS FUELING INFRASTRUCTURE, PON-14-608. This solicitation sought proposals from school districts and other public entities to fund projects that establish or expand infrastructure necessary to store, distribute and dispense compressed natural gas (CNG) for use in natural gas vehicles. (ARFVTP funding) Contact: Tami Haas. (Staff presentation: 10 minutes)
- a. RIALTO UNIFIED SCHOOL DISTRICT. Proposed resolution approving Agreement ARV-15-010 with Rialto Unified School District for a \$500,000 grant to construct and operate a CNG fueling station that will serve the school district and surrounding community.
  - b. LINDSAY UNIFIED SCHOOL DISTRICT. Proposed resolution approving Agreement ARV-15-012 with Lindsay Unified School District (LUSD) for a \$245,418 grant to replace decommissioned CNG fueling equipment at their existing CNG station. LUSD's current CNG vehicle fleet has been forced to travel many miles off-site to refuel, preventing the school district from achieving the full cost benefits of CNG vehicles.
  - c. CITY OF SAN DIEGO. Proposed resolution approving Agreement ARV-15-013 with the City of San Diego for a \$250,000 grant to install and operate a new CNG fueling facility at the City of San Diego's Environmental Services Operations Station in order to support the planned transition of the fleet's refuse and recycling vehicles from diesel to CNG fuel.
  - d. FONTANA UNIFIED SCHOOL DISTRICT (FUSD). Proposed resolution approving Agreement ARV-15-014 with the Fontana Unified School District (FUSD) for a \$500,000 grant to install and operate new CNG fueling equipment at their existing CNG station. The new equipment is necessary to accommodate expected increases in the number of CNG buses in the FUSD fleet and supplement existing compressors which are currently operating beyond designed limits to meet required throughput.

- e. BEAUMONT UNIFIED SCHOOL DISTRICT. Proposed resolution approving Agreement ARV-15-015 with Beaumont Unified School District for a \$500,000 grant to replace an existing and outdated CNG fueling station. This new filling station will have additional CNG fueling capacity to accommodate the growing needs of the School District and City of Beaumont.
  - f. FRESNO UNIFIED SCHOOL DISTRICT. Proposed resolution approving Agreement ARV-15-016 with Fresno Unified School District for a \$500,000 grant to expand infrastructure necessary to store, distribute and dispense CNG to school busses currently owned and operated by the district and support the future deployment of additional CNG school buses.
  - g. CITY OF SACRAMENTO. Proposed resolution approving Agreement ARV-15-018 with the City of Sacramento for a \$250,000 grant to install CNG fueling infrastructure at their North Area Corporation Yard. The City currently has 21 CNG vehicles and has plans to replace up to 53 diesel vehicles by 2020.
16. **Minutes:** Possible approval of the September 22, 2015 and October 14, 2015, Business Meeting Minutes.
  17. **Lead Commissioner or Presiding Member Reports.** A Lead Commissioner on a policy matter may report to the Commission on the matter and discussion may follow. A Presiding Member on a delegated committee may report to the Commission on the matter and discussion may follow.
  18. **Chief Counsel's Report:** The Energy Commission may adjourn to closed session with its legal counsel [Government Code Section 11126(e)] to discuss any of the following matters to which the Energy Commission is a party:
    - a. *In the Matter of U.S. Department of Energy (High Level Waste Repository), (Atomic Safety Licensing Board, CAB-04, 63-001-HLW).*
    - b. *Communities for a Better Environment and Center for Biological Diversity v. Energy Commission* (Court of Appeal, First Appellate District, # A141299).
    - c. *Energy Commission v. SoloPower, Inc. and SPower, LLC.* (Sacramento County Superior Court # 34-2013-00154569)

The Energy Commission may also discuss any judicial or administrative proceeding that was formally initiated after this agenda was published; or determine whether facts and circumstances exist that warrant the initiation of litigation; or that constitute a significant exposure to litigation against the Commission, including but not limited to, the following:

    - a. *Grant ARV-12-033* with Mendota Bioenergy, LLC.
    - b. iRobot Corporation
  19. **Executive Director's Report.**
  20. **Public Adviser's Report.**
  21. **Public Comment:** People may speak up to three minutes on any matter concerning the Energy Commission, with the exception of items appearing elsewhere on this agenda or items related to pending adjudicative (certification or enforcement) proceedings.

If you require special accommodations, contact Lourdes Quiroz at 916-654-5146, five days before the meeting.

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**Adjournment of Hearings and Meetings:** Depending upon time available and the orderly management of proceedings, the Commission may order adjournment (recess or postponement) of any noticed hearing or meeting, to be continued to the next day, another specific date or time, or to the next business meeting, as appropriate. Any such adjournment will be noticed at the time the order of adjournment is made (Government Code §§11128.5, 11129).